REMARKS

I. Introduction

In response to the Office Action dated August 13, 2008, which was made final, and in conjunction with the Request for Continued Examination (RCE) submitted herewith, claims 2-3, 20-21 and 38-39 have been canceled, and claims 1, 19 and 37 have been amended. Claims 1, 4-9, 11-19, 22-27, 29-37, 40-45 and 47-54 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Prior Art Rejections

In section (5) of the Office Action, claims 1-5, 7, 19-23, 25, 37-41 and 43 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of U.S. Patent No. 7,082,411 (Johnson) and U.S. Patent No. 5,812,988 (Sandretto). In section (6) of the Office Action, claims 6, 24 and 42 were rejected under 35 U.S.C. §103(a) as being obvious over Johnson in view of Sandretto and further in view of U.S. Patent No. 5,852,811 (Atkins). In section (7) of the Office Action, claims 8-9, 11-17, 26-27, 29-35, 44-45 and 47-53 were rejected under 35 U.S.C. §103(a) as being obvious over Johnson in view of Sandretto and further in view of "Fundamentals of Financial Management" (Kuhlemeyer).

However, in section (8) of the Office Action, claims 18, 26 and 54 were indicated as being allowable if rewritten in independent form to include the base claim and any intervening claims.

Applicant's attorney acknowledges the indication of allowable claims, but respectfully traverses the rejections. Specifically, Applicant's attorney submits that the combination of Johnson and Sandretto does not teach or suggest all of the various elements of Applicant's amended independent claims.

Nonetheless, the Office Action asserts the following:

> 5. Claims 1-5, 7, 19 -23, 25, 37-41 and 43 are rejected-under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 7,082,411 to Johnson et al (hereinafter Johnson) in view of US Patent Number 5,812,988 to Sandretto (hereinafter Sandretto).
>
> As per claims 1, 19 and 37
>
> Johnson discloses selecting accounts, amounts and rates (asset data) from account data stored in a database using selection criteria specified by one or more rules (column 4, lines 10-19) and performing one or more Future Value (FV) (C1,

expected payoff) calculations on the selected accounts by applying one or more FV attrition rules (discount factor) to the selected accounts using the selected amounts and rates, wherein the FV calculations determine a present value of an expected profitability value (score) of additional products that may be purchased (column 9, lines 3-26 & 58-60).

Examiner notes that applicant's specification conceptually defines attrition rates as "the rate at which a cash flow will be decreased" (page 8, lines 25-26). Johnson teaches a discount factor. One skilled in the art at the time the invention was made would understand that a discount factor is a rate used to discount or decrease future cash flow to obtain a net present value. Examiner further notes that the equation in the reference is a Future Value equation solving for Net Present Value (NPV). It would have been obvious to one skilled in the art at the time the invention was made that this equation could easily be manipulated to solve for Future Value or any of the other variables in the equation.

Johnson does not specifically teach matching results of a FV propensity rule to the matched accounts, obtaining an attrition rate for the matched accounts, calculating rate defined in the FV attrition rule for each forecast period, performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule and storing the FV amount.

Sandretto teaches matching results of a FV propensity rule to the matched accounts (column 8, lines 65-67), obtaining an attrition rate for the matched accounts (column 9, lines 2-7), calculating an effective attrition rate (column 9, lines 2-9) for each forecast period (column 10, lines 1-7) from the attrition rate (column 9, lines 2-9) and a net change rate (inflation rate) (column 17, lines 18-42) defined in the FV attrition rule for each forecast period (column 10, lines 1-7), performing the FV attrition rule (column 9, lines 2-9) and a propensity rule amount defined in the FV attrition rule (column 8, line 60 - column 9, line 19) and storing the FV amount (column 23, lines 25-26 and 60-61) and column 24, lines 17-23). Examiner notes that the reference teaches both storing projected returns as well as storing Net Present Value, the components of Future Value. It would have been obvious to one skilled in the art at the time the invention was made that storing of the components of Future Value could be used to easily determine the FV amount as FV is merely a calculation of the NPV in addition to returns.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to incorporate the process of matching results of a FV propensity rule to the matched accounts, obtaining an attrition rate for the matched accounts, calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period, performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule and storing the FV amount as taught by Sandretto to account for both the increases and decreases of value needed to more accurately estimate future value based upon the iterative and adaptive process disclosed by Johnson. Examiner further notes that propensity is the probability that something is likely to happen, a risk measure. Therefore, it would have also been obvious to one

skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk.

As per claims 2, 20 and 38

Johnson does not specifically teach applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules.

Sandretto teaches applying propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules (column 8, line 60 - column 9, line 19).

Therefore it would have been obvious to one skilled in the art at the time the invention was made to apply propensity rules to the selected accounts and applying the attrition rules to results of the propensity rules as taught by Sandretto to account for both the increases and decreases of value needed to more accurately estimate future value. Examiner further notes that propensity is the probability that something is likely to happen, a risk measure. Therefore, it would have also been obvious to one skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk.

* * *

4. Applicant's arguments have been fully considered but they are not persuasive. Applicant states that the prior art does "not teach or suggest FV attrition rules, FV propensity rules, attrition rates, effective attrition rates, net change rates, FV expected values, propensity rule amounts, or the specific steps or functions."

Sandretto teaches matching results of a FV propensity rule to the matched accounts (column 8, lines 65-67), obtaining an attrition rate for the matched accounts (column 9, lines 2-7), calculating an effective attrition rate (column 9, lines 2-9) for each forecast period (column 10, lines 1-7) from the attrition rate (column 9, lines 2-9) and a net change rate (inflation rate) (column 17, lines 18-42) defined in the FV attrition rule for each forecast period (column 10, lines 1-7), performing the FV attrition rule (column 9, lines 2-9) and a propensity rule amount defined in the FV attrition rule (column 8, line 60 - column 9, line 19).

Examiner notes that applicant's specification conceptually defines attrition rates as "the rate at which a cash flow will be decreased" (page 8, lines 25-26). Johnson teaches a discount factor. One skilled in the art at the time the invention was made would understand that a discount factor is a rate used to discount or decrease future cash flow. Sandretto also teaches applying attrition rules/risk/rates (abstract & column 8, line 60 - column 9, line 9).

Examiner further notes that propensity is the probability that something is likely to happen, a risk measure. Johnson teaches risk. One skilled in the art at the time the invention was made would understand that propensity rules are rules that measure and determine risk, and consequently rates used to discount or decrease future cash flow to obtain a net present value. Examiner also notes that the equation in the reference is a Future Value (FV) equation solving for Net Present Value (NPV). It would have further been obvious to one skilled in the art at the time the invention was made that this equation could easily be manipulated to

solve for Future Value or ay of the other variables in the equation. Sandretto further teaches applying propensity rules/amounts/rates (abstract & column 4, lines 13-1 6 & column 5, lines 12-14). Therefore, it would have also been obvious to one skilled in the art at the time the invention was made that propensity rules are rules that measure and determine risk and are used as taught by Johnson and Sandretto in order to determine an asset's discount rate and therefore future value.

Applicant's attorney respectfully disagrees with this analysis, and submits that Applicant's independent claims 1, 19 and 37 are patentable over the references.

With regard to the assertion that Sandretto teaches "applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates" at column 8, line 60 – column 9, line 19 (which were originally in claims 2, 20 and 38, but now are in independent claims 1, 19 and 38), Applicant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

Sandretto: column 8, line 60 – column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; (5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "applying one or more FV propensity rules to the selected accounts and applying one or more FV attrition rules to results of the FV propensity rules using the selected amounts and rates" being performed in this portion of Sandretto. "FV propensity rules" are defined at page 24, line 1 et seq. of Applicant's specification, while "FV attrition rules" are defined at page 28, line 8 et seq. of Applicant's specification. There is no discussion of an FV propensity rules or FV attrition rules in this portion of Sandretto. Instead, this portion of Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset.

With regard to the limitations "matching the FV attrition rule to the selected accounts," Applicant's attorney notes that the Office Action never addresses these limitations, and submits that none of the references teach these limitations.

With regard to the assertion that Sandretto teaches "matching the results of the FV propensity rule to the matched accounts" at column 8, lines 65-67, Applicant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

> Sandretto: column 8, line 60 – column 9, line 19
>
> It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; **(3) adjust the original set of cash flows and each additional set of cash flows for expected inflation;** (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; (5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "matching the results of the FV propensity rule to the matched accounts" being performed in this portion of Sandretto. In this portion of Sandretto, there is no matching being performed, no matched accounts, and no discussion of FV propensity rules. Instead, this portion of Sandretto refers only to adjusting original cash flows for expected inflation.

With regard to the assertion that Sandretto teaches "obtaining an attrition rate for the matched accounts" at column 9, lines 2-7, Applicant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

> Sandretto: column 8, line 60 – column 9, line 19
>
> It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; **(5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows);** (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "obtaining an attrition rate for the matched accounts" being performed in this portion of Sandretto. In this portion of Sandretto, there is no matching being performed, no matched accounts, and no discussion of attrition rates. Instead, this portion of Sandretto refers only to determining a discount rate using an initial risk measure, and discount rates are not attrition rates (an attrition rate is defined in Applicant's specification as the rate at which a cash flow will be decreased, whereas a discount rate is an interest rate that states future cash flows in current dollars).

With regard to the assertion that Sandretto teaches "calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period" at column 9, lines 2-9, column 10, lines 1-7, and column 17, lines 18-42, Applicant's attorney disagrees. These portions of Sandretto are bolded in the paragraphs reproduced below:

Sandretto: column 8, line 60 – column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; **(5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset;** (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

Sandretto: column 10, lines 1-7

The process begins by estimating an initial set of financial statements and cash flows for each asset (only cash flows if the asset is a bond or similar asset) for some number of periods using estimated operating, financing, accounting and economic variables an analyst has input into the process. Estimated cash flows may be also be adjusted for expected price changes, such as inflation.

Sandretto: column 17, lines 18-42

With respect to choosing inflation rates, there are many possibilities. Currently, the preferred method is to use a 4-6 month average of the CPI as the inflation rate for one month. One then divides 1.0+the 30-day Treasury yield by 1.0 plus the one-month inflation rate to determine the risk-free rate. Next one determines the cumulative inflation rate as of one year from the

valuation date by dividing 1.0 plus the 1-year Treasury yield by 1.0 plus the computed risk-free rate. One then assumes that the inflation rate changes uniformly, on a daily basis, from the 30-day rate to the one-year rate. Thus, for example, the one-year cumulative inflation rate might be 5.6% but the rate as of one year might be 5.9%, which is the level needed to increase the cumulative inflation rate from its level as of one month to its cumulative level of 5.6% as of one year. That is done through an iterative or convergent process. One can next use an anchor year that the user can specify, such as two or three years. One can then increase the inflation rate uniformly on a daily basis from its level as of one year (5.9% in this example) to the long-term inflation rate as of the anchor year. Thus, if the anchor year is 3, and the long-term inflation rate is 8.0%, the inflation rate increase increases uniformly, on a daily basis from 5.9% to 8.0%. As is obvious to one skilled in the art, users of said process may prefer other methods of estimating inflation rates.

There is no "calculating an effective attrition rate for each forecast period from the attrition rate and a net change rate defined in the FV attrition rule for each forecast period" being performed in these portions of Sandretto. In this portion of Sandretto, there is no discussion of effective attrition rates, and no discussion of calculations being performed for each forecast period. Instead, these portions of Sandretto refer only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, using the present values to determine simulated returns for each asset, and choosing an inflation rate.

With regard to the assertion that Sandretto teaches "performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule" at column 9, lines 2-9, and column 8, line 60 – column 9, line 19, Applicant's attorney disagrees. This portion of Sandretto is bolded in the paragraph reproduced below:

Sandretto: column 8, line 60 – column 9, line 19

It is another object of the present invention to provide a method and apparatus for creating a portfolio by: (1) estimating an initial set of cash flows for each asset in a set of two or more assets using known or conventional methods; (2) generate additional estimated cash flows based upon different estimates for one or more economic variables; (3) adjust the original set of cash flows and each additional set of cash flows for expected inflation; (4) determine an initial input risk measure for each asset based on a risk-return type asset pricing model; (5) determine an initial discount rate for each asset using the initial input risk measure for each asset and using

different economic variables that relate to each set of cash flows (for example, the risk-free rate and the market risk premium which are typically different for each set of cash flows); (6) discount the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows; (7) use the present values to determine simulated returns for each asset; (8) use the simulated returns for each asset to determine at least one simulated market index return; (9) regress simulated asset returns against simulated market returns or else use division to determine an output risk measure for each asset; (10) use the resulting output risk measure for each asset to estimate a new input risk measure and; (11) repeats steps 1 through 10 (or 4 through 10 in some implementations) in an iterative process until, for each asset, the output risk measure approximates to within desired accuracy the input risk measure used to determine the most recently iterated discount rate.

There is no "performing the FV attrition rule to calculate an FV expected value from the effective attrition rate and a propensity rule amount defined in the FV attrition rule" being performed in this portion of Sandretto. In this portion of Sandretto, there is no discussion of an FV attrition rule or FV expected values, and no discussion of effective attrition rates or propensity rule amounts. Instead, this portion of Sandretto refers only to determining a discount rate using an initial risk measure, discounting the inflation-adjusted cash flows at the discount rate to determine a present value for each set of cash flows, and then using the present values to determine simulated returns for each asset.

In summary, the portions of Johnson cited by the Office Action merely refer to establishing valuations of assets using a general definition of NPV (Net Present Value), and the portions of Sandretto cited by the Office Action merely refer to determining present values for the cash flows of assets, in the context of a method for estimating an asset's risk and net present value.

However, the combination of Johnson and Sandretto does not calculate all the values recited in Applicant's independent claims in the same manner as Applicant's independent claims. Indeed, the portions of Johnson and Sandretto cited against Applicant's independent claims 1, 19 and 37, do not teach or suggest FV propensity rules, FV attrition rules, attrition rates, or net change rates, or the specific steps or functions performed by Applicant's claims.

The remaining references, namely Atkins and Kuhlemeyer, fail to overcome these deficiencies of Johnson and Sandretto. Moreover, this is conceded by the Office Action because these references were cited only for teaching limitations of Applicant's dependent claims.

Thus, Applicant's attorney submits that independent claims 1, 19, and 37 are allowable over Johnson, Sandretto, Atkins, and Kuhlemeyer. Further, dependent claims 4-9, 11-18, 22-27, 29-36, 40-45 and 47-54 are submitted to be allowable over Johnson, Sandretto, Atkins, and Kuhlemeyer in the same manner, because they are dependent on independent claims 1, 19, and 37, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 4-9, 11-18, 22-27, 29-36, 40-45 and 47-54 recite additional novel elements not shown by Johnson, Sandretto, Atkins, and Kuhlemeyer.

III. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited.

Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicant's undersigned attorney.

Respectfully submitted,

GATES & COOPER LLP
Attorneys for Applicant

Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045
(310) 641-8797

Date: November 13, 2008

By: _____
Name: George H. Gates
Reg. No.: 33,500

GHG/

G&C 30145.440-US-01